STATEMENT OF DONALD D. ENGEN, FEDERAL AVIATION ADMINISTRATOR, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON AVIATION, CONCERNING THE FAA'S AVIATION SAFETY INSPECTION PROGRAM. MAY 22, 1986.

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before the Subcommittee today to discuss the FAA's aviation safety inspection program. This is one of the most critical functions performed by the FAA, and it is an area where I and my senior staff have devoted considerable attention over the past two years.

The process of aviation safety inspection is broad and complex. Many think of just air carrier inspection. These programs are important, but there is need to inspect general aviation, repair stations, and owner operators as well. The philosophy in aviation has always been voluntary compliance with regulations, with enforcement tools available to use against those who don't comply. Those who operate aircraft have learned the hard way. The alternative is to have a maintenance generated accident. Fortunately, that philosophy is strongly ingrained. We find willingness to comply with Federal Aviation Regulations. Operators understand that the regulations are there to provide standards and that these standards lead to safe operation. Where we find noncompliance, we take action. Where that noncompliance is with intent, that action is swift.

Safety inspection policy "follows" industry. The need for

changing (increasing or decreasing) the effort depends on the level of activity. There has been change in the air transport segment of aviation brought on by deregulation. That change was not accommodated, perhaps not recognized, in the 1979 to 1983 time frame. Inspectors were becoming burdened and being good hard working people they tried to adapt to this change by working harder. The rapid increase in the number of air carriers brought a real burden to the inspection system. New operators did not know how to start an airline and asked the FAA to help them start up. Many lacked the depth of background to build effective maintenance organizations. The mind set of some operators was cavalier--others have labored intensively to be professional. This changing industry came into the headlines in 1983 with a regional airlines accident that showed poor compliance with regulations, and less than adequate oversight and inspection by the FAA. Since that time, the FAA has been changing the way it operates its air carrier inspection system.

I came to the FAA from the NTSB at that time, with grave concern over our inspection role. I have sought both to strengthen and to standardize our approach to aviation safety inspections. We have taken a variety of firm actions to do so, as I will describe in a moment. We also have a comprehensive program of additional efforts in process, some of which will be completed shortly, others of which are either long-range or recurring in nature.

Before we could address and implement the kinds of firm, corrective measures we have taken, however, we needed to assure ourselves that we understood better what was occurring in the industry, and that we clearly understood and defined internally the areas that warranted improvement in our inspection techniques and approaches. To accomplish those objectives, a significant amount of internal review and analysis of the agency was performed over the past two years.

Through a variety of efforts, including the National Air Transportation Inspection (NATI) Program (which included two phases as well as an evaluation of the NATI data), the Secretary of Transportation's Safety Review Task Force, the General Aviation Safety Audit, and FAA Project SAFE, which seeks to pull together a variety of actions into one manageable program, I am convinced we have achieved a thorough understanding of efforts that needed to be taken to improve the overall quality and efficiency of our safety efforts. The studies have been completed; we learned what we needed to know; and we are now implementing needed improvements. I would like to describe for you today what was needed for improvement, and the concrete actions we have taken to achieve those improvements.

The most critical deficiency I found in my assessment of the agency was that there was a shortage of aviation safety

inspectors. This shortage, in my view, represented the single greatest obstacle to performing the amount and kind of safety surveillance I believed necessary. This deficiency had earlier been recognized by this Subcommittee, and by Secretary Dole who had authorized the FAA to hire an additional 166 safety inspectors in Fiscal Year 1984. Following that decision, which occurred before my appointment, I directed that a more detailed analysis be performed of our aviation inspection requirements. Based on that study, we recommended to the Secretary that our inspector workforce be increased by an additional 500 people. The Secretary agreed with this recommendation last September, and this fiscal year we have been recruiting to fill an additional 300 positions. At this time, we are hiring those personnel, and will achieve our goal by the end of this year. We have requested an additional 138 positions for FY 1987, with the remainder to be sought subsequently.

We needed to evaluate whether or not this improved staffing level was fully adequate to meet a changing and growing industry. The short-term study to define current staffing requirements was just that--an effort to determine present needs. It did not reflect the full range of factors which must be considered to assure on a continuing basis that inspector staffing meets anticipated workload requirements. Therefore, we set out to develop a new staffing standard which, for the first time, will accurately match workload with staffing needs. The final touches are now being

applied to that standard. It is based on an extensive job task analysis which analyzes and defines in detail every task that our inspectors perform. The data on these job functions are then compared to expected workload requirements to yield the necessary staffing. We will be applying this standard in developing our FY 1988 budget request, to ensure that our requested staffing level will closely track environmental conditions in the industry.

Concerns have been expressed before this Subcommittee about the qualifications of our inspector workforce. Let me address that. We have been very mindful not only of the need to recruit high quality individuals, but to assure that they as well as our existing workforce are adequately trained. Steps have been and are being taken to address those needs.

I have asked that all functional requirements for our inspectors be better defined, based on our greater understanding of the individual tasks performed by our workforce. We want to strengthen the general qualification requirements that are set out for initial hiring of inspectors. But we have to deal in a "real-time" environment. To meet the current workload requirements, we must begin staffing to the appropriate levels now, not one or two years from now. Therefore, our hiring has continued concurrently with efforts to improve our job definitions

and qualification standards. And we have taken steps to assure that we are building a quality workforce.

As one aid to helping assure the quality of our new inspector workforce, we developed and issued national guidelines to strengthen and standardize the interview process. Furthermore, in the last six months, we have restructured and improved our complete initial training course for inspectors, which is now a three-month course conducted at our Academy in Oklahoma City. I should also note that, for the first time, this course is now conducted on a pass/fail basis, so that it serves as an additional screening device. Thus, we are confident that our new personnel will initially be better prepared to assume their inspector functions than those hired prior to these course refinements. The first class trained under this revised program entered the Academy on January 31. We are now recycling prior "new" hires through the portions of this revised course that they did not receive during their initial training.

Additionally, to better control and measure the progress of these new inspectors through their initial training within the FAA, we have established an automated on-the-job training tracking system. This system identifies individual inspector work functions in which an individual must be qualified, and tracks on an automated basis an individual's progression through "certification" by a designated OJT instructor/observer in each of

these functions. This program, which has been in process for many months and is to be implemented this month, also requires the recurring review of each individual's training status by supervisory personnel. In addition to clearly defining an individual's career progression and areas in which that individual is in need of additional training or seasoning, this new program will serve as a management tool for us to identify on a universal basis the status of training for our new personnel.

I mentioned a moment ago that I believed it was necessary to afford improved training opportunities to our current inspector workforce as well as the new. We have done and are doing that. For example, we have developed a variety of technical seminars for our maintenance and avionics inspectors which we have presented to them throughout the country. We have also permitted industry to participate in these seminars as well. We are continuing efforts to provide enhanced training to our inspectors both to improve their general understanding of their jobs and to achieve greater standardization.

I cannot emphasize strongly enough how importantly I view standardization within the FAA and in the entire aviation industry. This was one of my earliest messages in the FAA, and is undoubtedly the one that has since been heard most often. Yet, this is an area in which we continue to need to make additional

progress. My sense is that the FAA had grown too "decentralized" over the years, leaving too much room for regional determinations of how surveillance was to be conducted and, for that matter, how regulations were to be interpreted. We are continuing to work to assure a strengthened headquarters' control over this function, recognizing that there is a delicate balance. In order to be responsive to the public, you need people on scene with authority and flexibility to deal with problems. You don't want to have automatons. We have been and will continue issuing stronger policy guidance and directives from headquarters to better assure a national program rather than a number of regional ones.

We recognized that there was a need to establish here in headquarters the minimum number of inspections to be conducted of each airline by type of inspection. We did that, starting the beginning of this fiscal year by issuing a National Work Program. For the first time, commencing the beginning of this fiscal year, we outlined in detail a surveillance program which should assure a more balanced inspection program nationwide. The program guidelines permit additional targetting of surveillance resources at the regional level to meet locally defined problems. We are considering the extent to which more control should be exercised over this part of the surveillance program as well, and will be in a better position to reach that decision once we have attained more experience this year with the new program guidelines.

Prescribing minimum levels of inspections nationwide was still not enough. Our experience with NATI indicated that there was a need on a continuing basis for in-depth special inspections of the aviation industry. All facets of the industry should know that, on a recurring basis, they are going to be subject not just to ongoing routine surveillance but to detailed scrutiny. We are doing that through our National Inspection Program, which selects specific segments of the industry, by operator, manufacturer, or repair station for an in-depth inspection on a cyclical basis. Following the Arrow Air tragedy in Newfoundland, we amended this year's National Inspection Program to expedite the review of carriers who provide charter service to the military. We also have focused on engine repair stations as a special emphasis area. From now on, we will continue to define for each year an in-depth inspection program, subject, of course, to such refinements as may be occasioned by the need to adjust to real-time problems that arise. And that's an important point, Mr. Chairman. In my view, a program is only as good as its ability to accommodate and adjust to new problems that occur.

At this point, I would like to add that, as a tool to help our principal operations inspectors and special surveillance teams, we instituted a program just last year called the Record Evaluation Audit Program (REAP). This program supplements our inspectors with contract personnel who are highly trained in auditing and can

trace the paper trail at an airline to validate the accuracy of an airline's recordkeeping system. This extra capability is not only an important tool to us in conducting the actual review of an operator, but should help serve as a deterrent factor to those operators who might consider altering records to mislead the FAA.

In addition to better structuring of an overall surveillance program for the entire country, we have been hard at work to achieve greater standardization of the actual inspections conducted. A few moments ago, I alluded to training improvements we have made. We have also been revising materials used by our inspectors on a day-to-day basis when performing their jobs. We are placing greater reliance on aids such as "checklists," so that we know an inspection conducted at one location by one inspector is the same when conducted elsewhere by another individual. One example of our efforts to improve on-the-job guidance materials for our inspectors is the recent revision in July 1985, of our maintenance handbooks for both general aviation and air carrier inspectors.

Our efforts to improve our surveillance program go beyond just standardization of the approach we use, adding inspectors and improving their training. Careful assessment of our surveillance program indicated to me that we needed to have a better focus for assuring the "quality control" of our surveillance program. To

achieve that goal, we established an evaluation staff reporting to the Director of Flight Standards, John Kern. This staff has responsibility both for evaluating the quality (including standardization) of our surveillance efforts and for surveying the industry on a recurring basis to determine changes which are occurring so that our programs can be timely amended to address those changes. We have hired the manager of this staff as well as several staff personnel, and expect the staff to be fully operational this summer. This national evaluation effort is being supplemented by regional evaluation programs.

But having an evaluation program is not enough, because it is simply not feasible to evaluate everyone all the time. Any evaluation program must for that reason be cyclical and sampling in nature. Therefore, it is critical that our management information systems be improved to foster timely and accurate communication of key safety data.

We have not progressed as far or as fast in this area as I would like, but we have made progress. For example, we recently completed implementation of 12 national software subsystems for our Aviation Safety Analysis System, which we refer to as ASAS. Even though full automated capabilities have not yet been brought on line, I don't want to leave you with the impression that we don't have significant capabilities of determining what is happening on a current basis in our regions. We do.

Any major issue which arises is brought to my attention or that of my senior staff immediately either directly or through our communications center which operates 24 hours a day, 365 days a year. During special investigations, as has been the case during our intensified surveillance of TWA during its flight attendant strike, we hold frequent telephone conference calls linking key personnel throughout the country to compare information. Moreover, our field offices are required to input inspection data into their computers, so that it is available as a management tool to oversee the status of our surveillance efforts. We also have computerized the data on such programs as our National Inspections Program so that we can readily access that information to determine our accomplishments to date. In short, there are a variety of management tools we have already put in place to have effective control over the national system. Mr. Broderick will elaborate further on that point if you would like.

Before closing, Mr. Chairman, I want to make the point that I have sought to discuss the positive accomplishments we have already made. It is important, however, to note that much is being done and remains to be done. It is not possible to totally restructure a system in two years. We have made tremendous strides. But we are not yet where we need to be. The comprehensive approach we are taking under Project SAFE, in combination with the accomplishments we have already made, will place us where we need to be.

Rather than describing the details of Project SAFE, since it is such an exhaustive program, I am attaching to my prepared statement a copy of our most recent update of the status of the programs we have tied together under Project SAFE. You will note that this includes efforts across the board in our Flight Standards area, and represents an unprecedented approach to a virtual top-to-bottom revision of that organization. Just by way of example you will note that we are in the process of revising all of our handbooks for our inspector personnel. This will accommodate industry changes that have occurred which should be reflected in our guidance materials; it will provide more detailed guidance to our inspectors to do their jobs better; and it will provide additional tools such as checklists to assist our inspectors.

Although I have not described Project SAFE in detail in my statement, I would hope that we would have the opportunity today to discuss this program more fully with the Subcommittee. I am confident that you will feel as I do that this program is an important complement to the numerous positive actions we have already recently completed.

I would close by saying that there is need for administrative support staff as well. If we just had inspectors we could not be effective. We must have means of communication, a free flow of

information between field and headquarters. Administrative services enabling the processing of reports is needed. Once an infraction of regulations is processed, there must be a capability to enforce. FAA attorneys and their administrative support are an integral part of safety inspection because if there is no way to ensure compliance, inspection has little meaning. This FAA team is at work improving safety in aviation.

That completes my prepared statement, Mr. Chairman. I would be pleased to respond to questions that you and Members of the Subcommittee may have.